D-Link®

Version 1.0 | June 13, 2013

User Manual

Pan & Tilt Day/Night Network Camera

DCS-5010L

Manual Overview

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Manual Revision

Revision	Date	Description
1.0	June 13, 2013	• Initial release

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Product Overview

Package Contents

- DCS-5010L Pan & Tilt Day/Night Network Camera
- CAT5 Ethernet Cable
- Power Adapter
- Quick Install Guide
- Mounting Bracket and Screws

If any of the above items are missing, please contact your reseller.

Note: *Using a power supply with a different voltage than the one included with your product will cause damage and void the warranty for this product.*

System Requirements

- Computer with Microsoft Windows® 8/7/Vista®/XP, or Mac with OS X® 10.6 or higher
- PC with 1.3 GHz or above and at least 128 MB RAM
- Internet Explorer 7, Firefox 12, Safari 4, or Chrome 20 or higher version with Java installed and enabled
- Existing 10/100 Ethernet-based network or 802.11g/n wireless network

Introduction

Congratulations on your purchase of the DCS-5010L Pan & Tilt Day/Night Network Camera. The DCS-5010L is a versatile and unique solution for your home or small office. Unlike a standard webcam, the DCS-5010L is a complete system with a built-in CPU and web server that transmits high quality video images for security and surveillance. The pan/tilt function allows the camera to patrol a wide area, while the built-in IR LEDs provide around-the-clock surveillance regardless of the lighting conditions.

The DCS-5010L can be accessed remotely, and controlled from any PC/Notebook over your local network or through the Internet via a web browser. The simple installation and intuitive web-based interface offer easy integration with your Ethernet/Fast Ethernet or 802.11 b/g/n wireless network, and with Wireless N technology you have the freedom to place the DCS-5010L anywhere within range of your existing wireless network. The DCS-5010L also comes with remote monitoring and motion detection features for a customizable, cost-effective security solution.

Your DCS-5010L is mydlink-enabled, which means that you can view and manage your camera from anywhere over the Internet through the mydlink website, or through the mydlink mobile app for iOS and Android. You can view your live video feed, take snapshots, and manage the camera's configuration, all from anywhere you have Internet access.

Features

Easy to Use and mydlink-Enabled for Easy Access and Management
The DCS-5010L is a standalone surveillance camera that requires no special hardware or software, and can operate independently, even without a PC. This camera is also mydlink-enabled, which means you can view and manage your camera through the mydlink website, or through the mydlink mobile app for iOS and Android mobile devices.

Pan/Tilt for Wide Viewing Area
Patrol a large area with one camera thanks to the DCS-5010L's pan and tilt functions. You can use the web interface to manually adjust the camera lens position, or set up to 24 pre-defined preset positions, enabling you to quickly move to frequently used points of interest.

IR LEDs for Day and Night functionality
The built-in infrared LEDs enable night time viewing of up to 8 meters (26 feet), giving you clear images regardless of lighting conditions.

H.264 Codec for Smooth, Space-Efficient Video
This camera supports use of the H.264 video codec, which gives you high-quality video with reduced bandwidth requirements. This means that you can enjoy smoother, more reliable video streaming over the Internet, and less disk space is required to save recordings.

Motion Triggered Notifications and Recordings
The DCS-5010L can send e-mail notifications with snapshots or video clips whenever motion is detected. You can customize areas of the video to monitor for motion to keep watch over specific areas of interest, and have the DCS-5010L send you an e-mail notification or upload images to an FTP server whenever motion is detected.

802.11b/g/n Wireless or Ethernet/Fast Ethernet Support
The DCS-5010L offers wireless 802.11b/g/n and Ethernet/Fast Ethernet connectivity, making it easy to integrate into your existing network environment. The DCS-5010L works with either a 10 Mbps Ethernet-based network or 100 Mbps Fast Ethernet-based network for traditional wired environments, and works with 802.11b/g/n wireless routers or access points for added flexibility. The Site Survey feature also allows you to view and connect to any available wireless networks within range of the camera.

Remote Monitoring Utility
This camera also includes the D-ViewCam software, which adds enhanced features and functionality that help you create a full surveillance system for up to 32 cameras. With D-ViewCam, you can view multiple cameras at the same time, record video, and set up scheduled and triggered recordings.

Hardware Overview

Front View

Rear View

WPS
RESET
ETHERNET
12V⎓1A
Power Connector
WPS Button
Reset Button
Ethernet Port

Installation

There are three ways to set up your camera:

Zero Configuration Setup: If you have a mydlink-enabled router (D-Link cloud router), this is the easiest way to set up your camera. Refer to "Zero Configuration Setup" on page 10.

Camera Installation Wizard: If you do not have a mydlink-enabled router, use the Camera Installation Wizard to guide you through setup and initial configuration of your camera. Refer to "Camera Setup Wizard" on page 13.

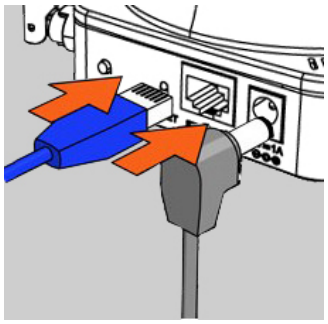
Manual Hardware Installation: This section shows you how to manually set up your camera, however in order to use the mydlink features of your camera, you will still need to run the Camera Installation Wizard. Refer to "Manual Hardware Installation" on page 14.

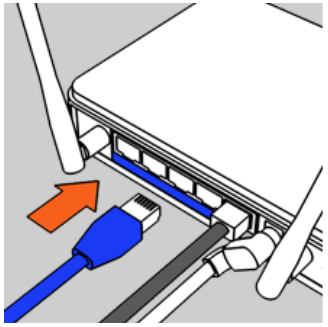
Zero Configuration Setup

If you have a mydlink-enabled Cloud Router, you can take advantage of Zero Configuration Setup. Zero Configuration automatically configures your camera's settings for you and adds the camera to your mydlink account automatically without the need to run the Setup Wizard.

Step 1 - Connect the Ethernet Cable and Power Cable

Use the included Ethernet cable and plug it into the camera. Plug the other end into an available (LAN) port on your D-Link Cloud Router. Connect the power adapter into the power port on the back of the camera.

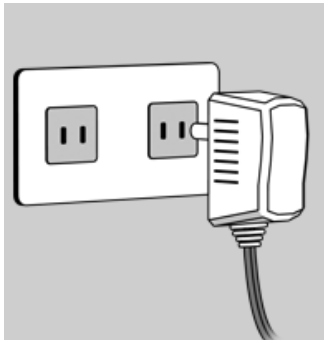




Note: *If you wish to use your camera wirelessly, you will be able to remove the cable after the Zero Configuration Setup is complete and place the camera within your wireless network. The router will configure the camera's wireless settings automatically.*

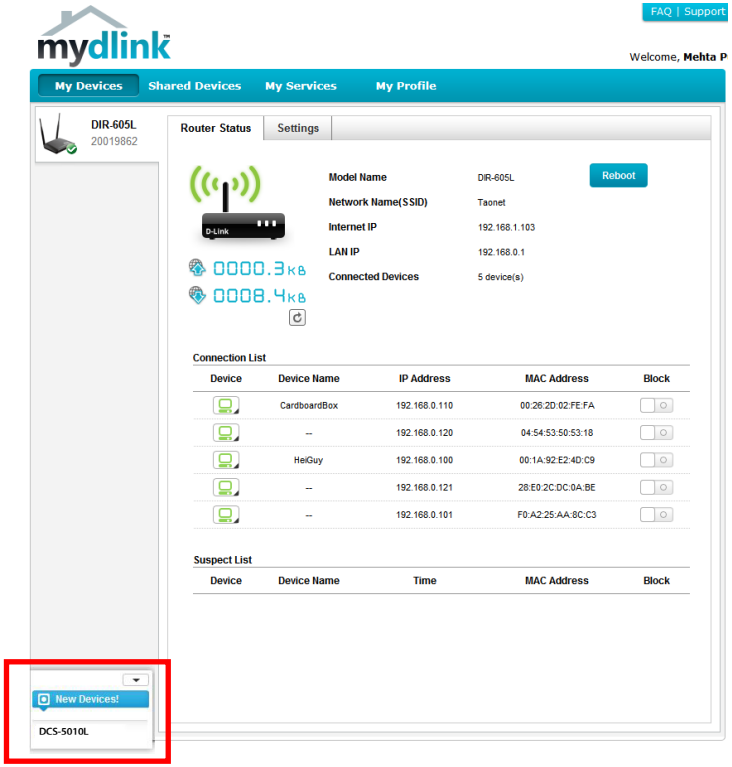
Step 2 - Attach the External Power Adapter

Plug the power adapter into a wall outlet or surge protector.



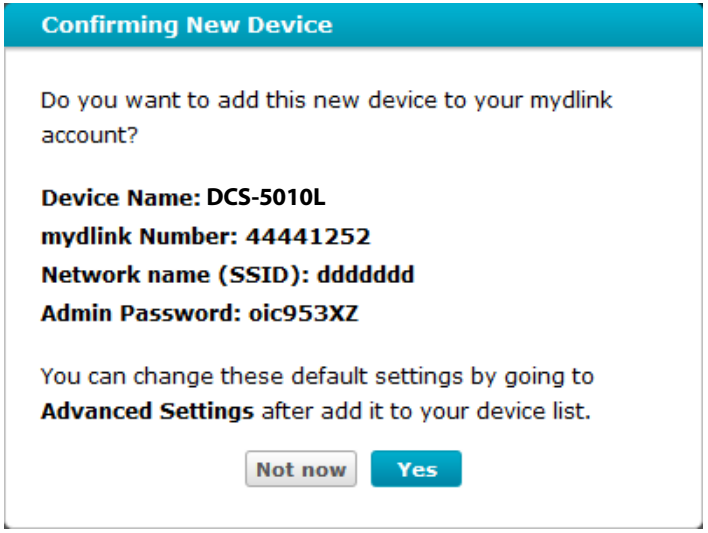
Step 3 - Check Your mydlink Account

From any computer with an Internet connection, open a web browser such as Internet Explorer and log in to your mydlink account. The mydlink page will check for new devices and display a **New device Found!** notification in the bottom-left corner. Click the notification to continue.

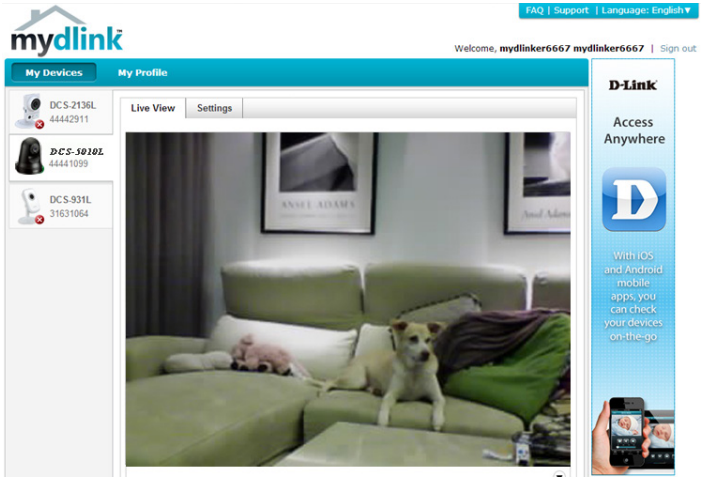


Step 4 - Register Device to mydlink

A summary and confirmation notification will appear with the automatically configured details. Make a note of the details and click **Yes** to add the camera to your account.


Confirming New Device
Do you want to add this new device to your mydlink account?
Device Name: DCS-5010L
mydlink Number: 44441252
Network name (SSID): ddddddd
Admin Password: oic953XZ
You can change these default settings by going to Advanced Settings after add it to your device list.
Not now
Yes

Zero Configuration will navigate to the mydlink Live View tab for your camera where you will see a screen similar to the following.



If you wish to connect your camera to your router wirelessly, you can simply disconnect the Ethernet cable and move the camera to its intended location. Your router's wireless settings have been automatically transferred to the camera and no further configuration is required.

Your camera is now set up. You can skip to “mydlink” on page 18 to learn more about the mydlink features of this camera, or go to “Configuration” on page 19 for advanced configuration.

Note: *If the live image is blurry or out of focus, you can manually adjust the focus by rotating the manual focus bezel surrounding the camera lens.*

Camera Setup Wizard

If you do not have a mydlink-enabled cloud router, you can use the Camera Setup Wizard to guide you through the process of adding your camera to the mydlink service

Please download the Setup Wizard from **http://www.mydlink.com/support**.

Windows Users - Extract ("unzip") the files to a folder on your computer and then double-click the autorun.exe file.

Mac Users - Download the Mac OS Setup Wizard. Open the SetupWizard file and launch the application.

After about 30 seconds, the Setup Wizard will open, which will guide you step-by-step through the installation process from connecting your hardware to configuring your camera and registering it with your mydlink account.

Click **Set up your Cloud Camera** to go through the Setup Wizard, which will guide you step-by-step through the installation process from connecting your hardware to configuring your camera and registering it with your mydlink account.

mydlink
DCS-5010L Setup Wizard
Set up your Cloud Camera
Click here for an easy step-by-step wizard that guides you through installation.
You can set up your camera to use mydlink Cloud service, or you can choose to have the camera run independently.
*Zero Configuration is recommended if you have a registered Cloud Router with mydlink.
Install D-ViewCam
D-ViewCam is a highly versatile application for creating a multi-camera local surveillance system for your home or office.
D-Link
Exit
Camera User Manual
Quick Installation Guide
D-View Cam Manual
Adobe Reader

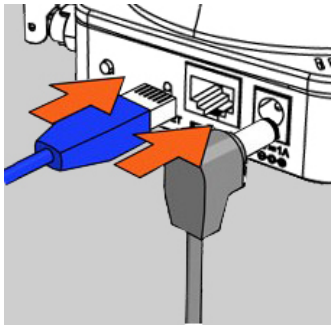
Manual Hardware Installation

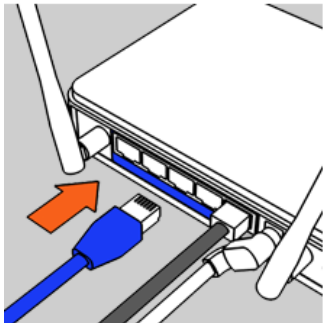
If you wish to set up your camera without using the Camera Setup Wizard, please follow these steps.

Note: In order to use the mydlink features of this product, you will need to go through the Camera Setup Wizard or Zero Configuration Setup.

Connect the Ethernet Cable and Power Cable

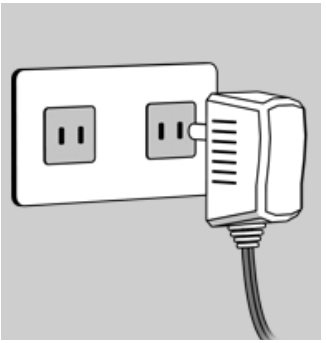
Use the included Ethernet cable and plug it into the camera. Plug the other end into an available LAN port on your router. Plug the supplied power adapter into the back of the camera





Plug in the External Power Adapter

Plug the power adapter into a wall outlet.



Configure Your Camera

Refer to "Configuration" on page 19 for information on how to configure your camera.

Optional: Use WPS to Connect Wirelessly

You can use WPS to connect your camera to your network wirelessly. For more information, refer to "WPS - Push Button Setup" on page 16. If your router does not support WPS, you will still be able to set up your camera's wireless settings in the camera's web interface.

Wireless Installation Considerations

Your D-Link Wireless Network Camera lets you access your network using a wireless connection from anywhere within the operating range of your wireless network. However, the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Minimize the number of walls and ceilings between your adapter and other network devices (such as your Network Camera) - each wall or ceiling can reduce your adapter's range by 1-30 meters (3-90 feet).

2. Be aware of the direct line between network devices. A wall that is half a meter thick (1.5 feet), at a 45-degree angle appears to be almost 1 meter (3 feet) thick. At a 2-degree angle, it can appear over 14 meters (42 feet) thick. Position your devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

3. Building materials make a difference. A solid metal door or aluminum studs may weaken the wireless signal. Try to position your access points, wireless routers, and other networking devices where the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.

4. Keep your product at least or 1-2 meters (3-6 feet) away from electrical devices or appliances that generate RF noise.

5. If you are using 2.4 GHz cordless phones or other radio frequency sources (such as microwave ovens), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.

WPS - Push Button Setup

If your router supports Wi-Fi Protected Setup (WPS), you can create a secure wireless connection using the WPS Button on the back of the camera. Please note that WPS setup only establishes a secure wireless connection, and you will still need to run the Setup Wizard to configure your camera.

To create a WPS connection:

Step 1
Make sure the camera is plugged in, then press and hold the WPS button for ten seconds. The blue WPS status LED will start blinking.

Step 2
Press the WPS button on your router within 60 seconds. The WPS button is usually on the front or side of your router. On some routers, you may need to log in to the web interface and click on an on-screen button to activate the WPS feature. If you are not sure where the WPS button is on your router, please refer to your router's User Manual.

The DCS-5010L will automatically create a secure wireless connection to your router. While connecting, the blue LED will flash and your camera will reboot.

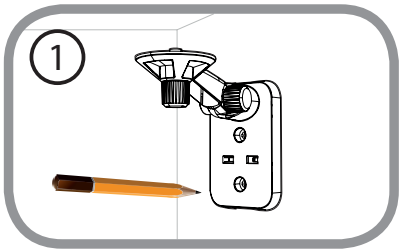
WPS Button

Mounting Instructions

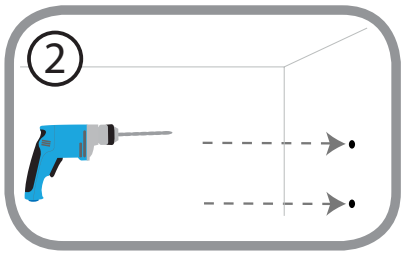
To mount your camera on a wall or ceiling, please follow the steps below.

It is suggested that you configure the camera before mounting.

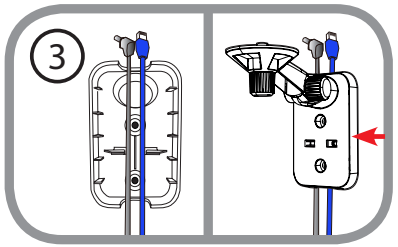
Place the mounting bracket where you want to position the camera and use a pencil to mark the holes.



Use appropriate tools to drill two holes the same diameter as the plastic anchors. After drilling the holes, insert the plastic anchors to support the screws.

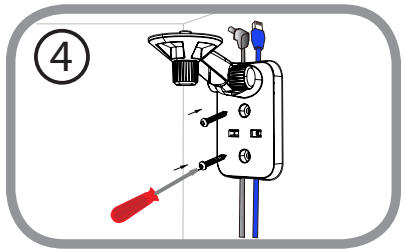


If desired, the power and Ethernet cables can be concealed behind the mounting bracket. Run the cables through the back of the mounting bracket, securing them with the built-in guides. Be sure to leave enough cable length protruding from the top to allow connection to the camera.

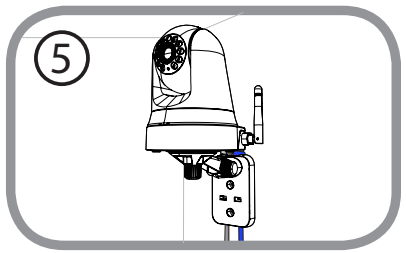


Fasten the mounting bracket to the wall using the screws provided.

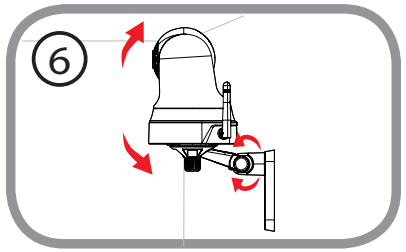
Do not overtighten the screws as this may crack the mounting bracket.



Using the supplied thumbscrew, fasten the camera to the mounting bracket. Connect the power and Ethernet cables to the camera.

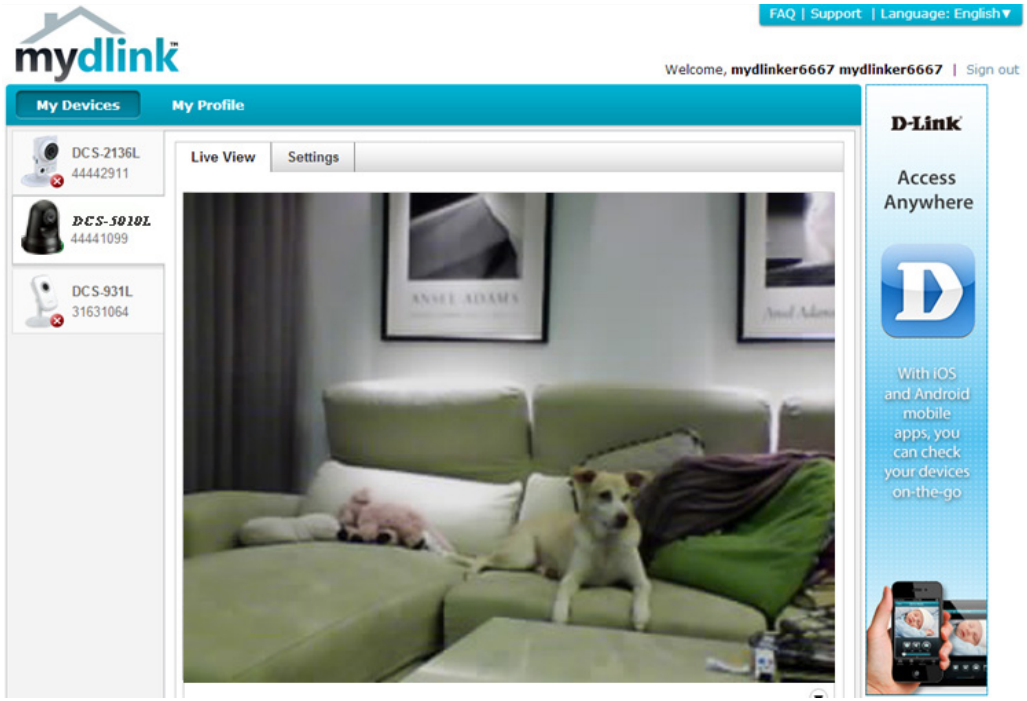


Adjust the angle of the arm on the mounting bracket as required. Tighten the thumbscrew to lock the arm in place.



mydlink

After registering your DCS-5010L camera with a mydlink account in the Camera Installation Wizard, you will be able to remotely access your camera from the **www.mydlink.com** website. After signing in to your mydlink account, you will see a screen similar to the following:



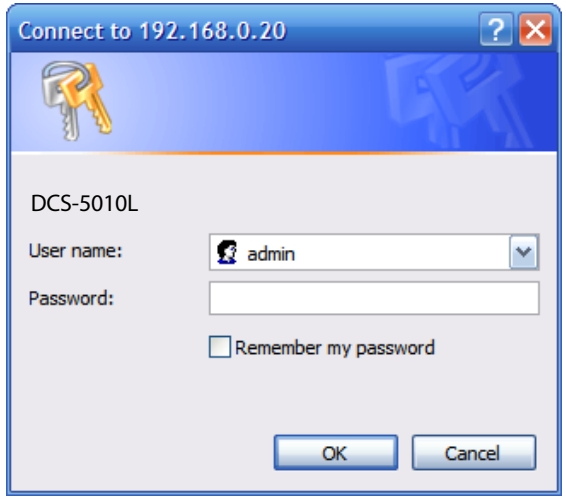
For more details on using your camera with mydlink, go to the **Support** section of the mydlink website and check the **User Manual** section for your product to find the latest instruction guide for your camera's mydlink features.

Configuration
Using the Web Configuration Interface

After completing the Camera Installation Wizard, your camera is ready to use. The camera's built-in web configuration interface is designed to allow you to easily access and configure your DCS-5010L. There are two ways in which you can access your camera's web configuration interface:

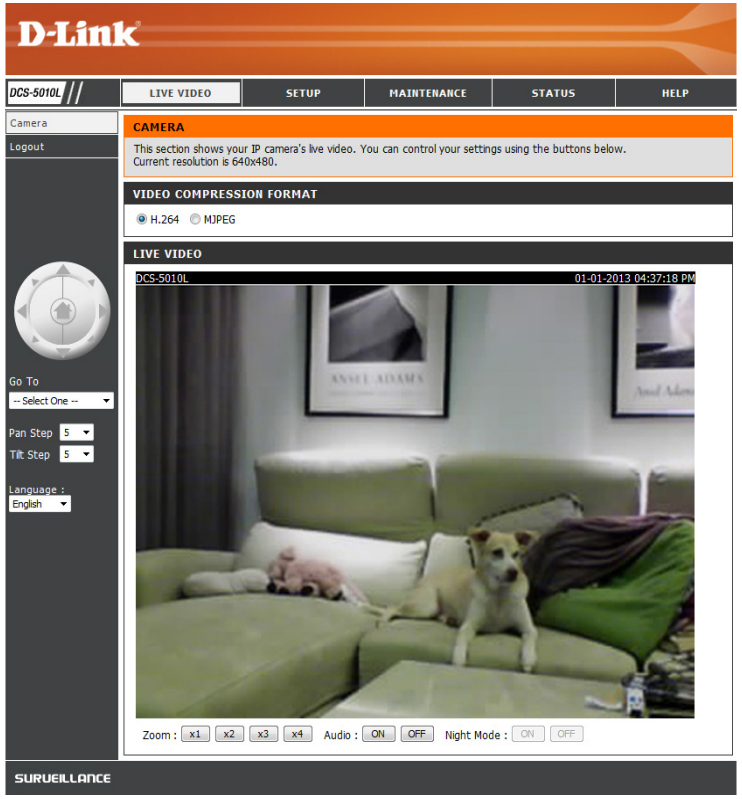
- Log in to your mydlink account to access your camera's configuration interface.
- You can also access the interface locally by entering the IP address of your camera into a web browser, such as Internet Explorer®. To log in, use the User name **admin** and the password you created in the Installation Wizard. If you did not create a password, leave the password field blank. After entering your password, click **OK**.

Note: If you are directly connecting your camera to your PC, or if you are using the camera on a closed network, the default IP is **192.168.0.20**. If the camera is connected to a router or network, a different IP address may have been assigned.



Live Video

The Live Video screen shows you the live video feed from your camera. For information on how to configure your Live Video streams, refer to "Video" on page 28.



Video Compression Format: Click the **H.264** or **MJPEG** radio button to choose which stream to view.

Pan/Tilt Wheel: Click on the directional arrows on the pan/tilt wheel to manually control the pan and tilt functions of the camera. At any time, you can click the **home** button in the center of the wheel to return the camera to its home position.

Go To: Select one of the preset locations from the drop-down menu to move the camera to that position. Preset positions can be set by going to the **Camera Control** section of the **Setup** menu.

Pan Step: Select the increment of movement for each press of a pan (up/down) arrow on the pan/tilt wheel.

Tilt Step: Select the increment of movement for each press of a tilt (left/right) arrow on the pan/tilt wheel.

Language: You can select the desired language for the web interface from this drop-down menu.

Zoom: Click on these buttons to adjust the level of digital zoom applied to the image

Audio: Click on these buttons to turn audio playback on and off.

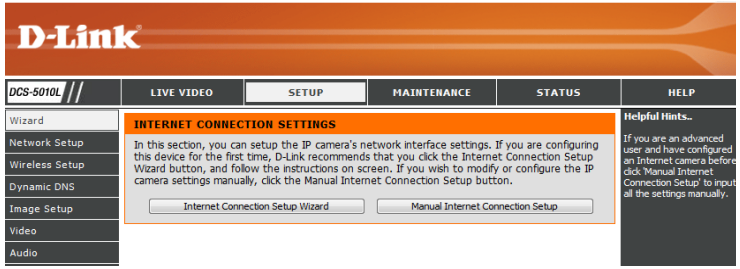
Night Mode: If you have set the night mode to manual, the night mode feature can be toggled using these buttons

Note: If the live image is blurry or out of focus, you can manually adjust the focus by rotating the manual focus bezel surrounding the camera lens.

Setup
Wizard

You may choose to configure your Internet connection by using the **Internet Connection Setup Wizard** that includes step-by-step instructions. Otherwise, you may manually configure your connection using the **Manual Internet Connection Setup**.

Note: To register your camera with mydlink and enable its mydlink-related features, you will need to use the Camera Installation Wizard. Please refer to "Camera Setup Wizard" on page 13 for more details.


D-Link
DCS-5010L
LIVE VIDEO
SETUP
MAINTENANCE
STATUS
HELP
Wizard
Network Setup
Wireless Setup
Dynamic DNS
Image Setup
Video
Audio
INTERNET CONNECTION SETTINGS
In this section, you can setup the IP camera's network interface settings. If you are configuring this device for the first time, D-Link recommends that you click the Internet Connection Setup Wizard button, and follow the instructions on screen. If you wish to modify or configure the IP camera settings manually, click the Manual Internet Connection Setup button.
Internet Connection Setup Wizard
Manual Internet Connection Setup
Helpful Hints..
If you are an advanced user and have configured an Internet camera before click 'Manual Internet Connection Setup' to input all the settings manually.

Internet Connection Setup Wizard

This wizard will guide you through a step-by-step process to configure your new D-Link Camera and connect the camera to the Internet.

Click **Next** to continue.

WELCOME TO D-LINK SETUP WIZARD - INTERNET CONNECTION SETUP
This wizard will guide you through a step-by-step process to configure your new D-Link Camera and connect the camera to the internet.
Step 1: Setup LAN Settings
Step 2: Setup DDNS Settings
Step 3: Server Name Settings
Step 4: Setup Time Zone
Back
Next
Cancel

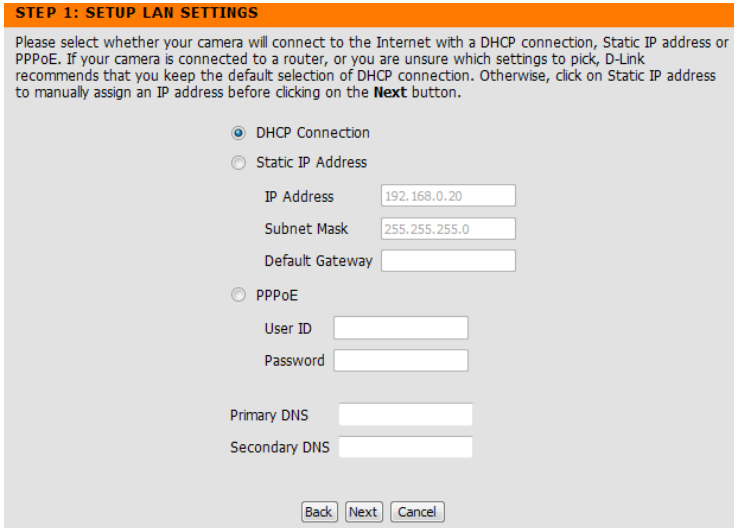
Select what kind of Internet connection your camera should use:

DHCP Connection (Default): If you are connected to a router, or are not sure which connection to use, select DHCP Connection.

Static IP Address: This will allow you to manually enter your network settings for the camera. Select this option if your Internet Service Provider or network administrator has provided you with a set of predefined IP addresses. If you are not sure what settings to enter, check with your Internet Service Provider or network administrator.

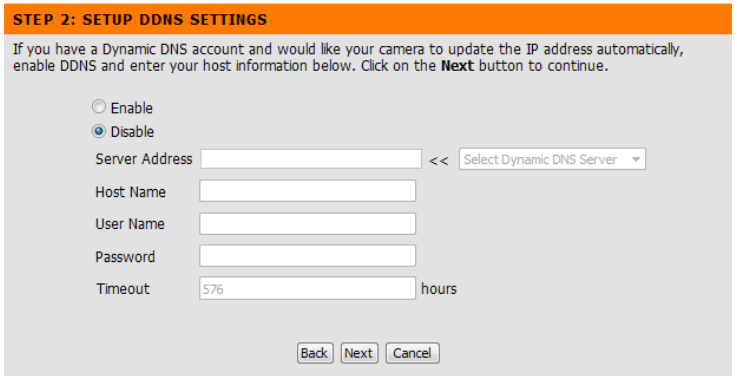
PPPoE Connection: If your camera is directly connected to a DSL modem, you may need to use PPPoE. Enter the username and password provided to you by your Internet Service Provider.

Click **Next** to continue.

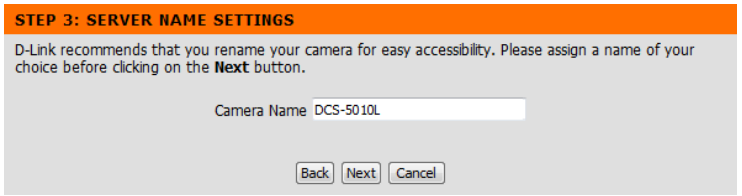

STEP 1: SETUP LAN SETTINGS
Please select whether your camera will connect to the Internet with a DHCP connection, Static IP address or PPPoE. If your camera is connected to a router, or you are unsure which settings to pick, D-Link recommends that you keep the default selection of DHCP connection. Otherwise, click on Static IP address to manually assign an IP address before clicking on the Next button.
DHCP Connection
Static IP Address
IP Address
192.168.0.20
Subnet Mask
255.255.255.0
Default Gateway
PPPoE
User ID
Password
Primary DNS
Secondary DNS
Back
Next
Cancel

If you have a Dynamic DNS account and would like the camera to update your IP address automatically, select **Enable** and enter your host information. Otherwise, simply select **Disable**.

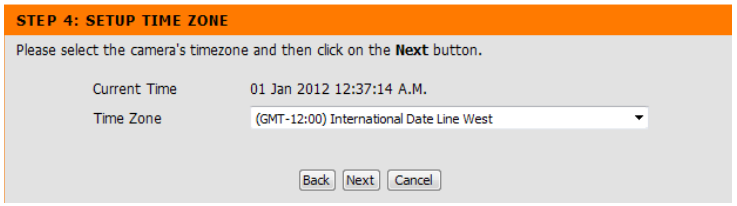
Click **Next** to continue.



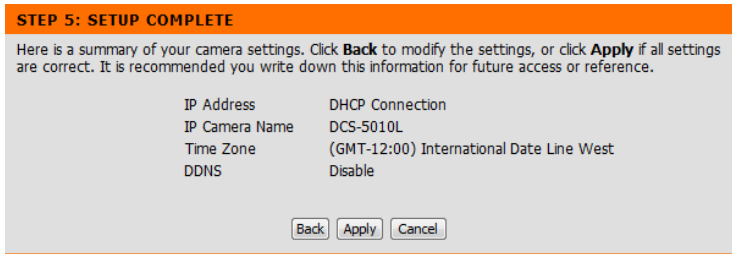
Enter a name for your camera. Click **Next** to continue.


STEP 3: SERVER NAME SETTINGS
D-Link recommends that you rename your camera for easy accessibility. Please assign a name of your choice before clicking on the Next button.
Camera Name
DCS-5010L
Back
Next
Cancel

Configure the correct time to ensure that all events are triggered, captured, and scheduled at the right time. Click **Next** to continue.



This page displays your configured settings. Click **Apply** to save and activate your changes, or click **Back** to change your settings.


STEP 5: SETUP COMPLETE
Here is a summary of your camera settings. Click Back to modify the settings, or click Apply if all settings are correct. It is recommended you write down this information for future access or reference.
IP Address
DHCP Connection
IP Camera Name
DCS-5010L
Time Zone
(GMT-12:00) International Date Line West
DDNS
Disable
Back
Apply
Cancel

Network Setup

This section allows you to configure your network settings.

DHCP: Select this connection if you have a DHCP server running on your network and would like a dynamic IP address to be assigned to your camera automatically.

Static IP Client: Select this connection type if your Internet Service Provider (ISP) or network administrator has provided you with a static or fixed IP address and other network information for your camera. Click on the **Static IP Address** radio button to activate this method.

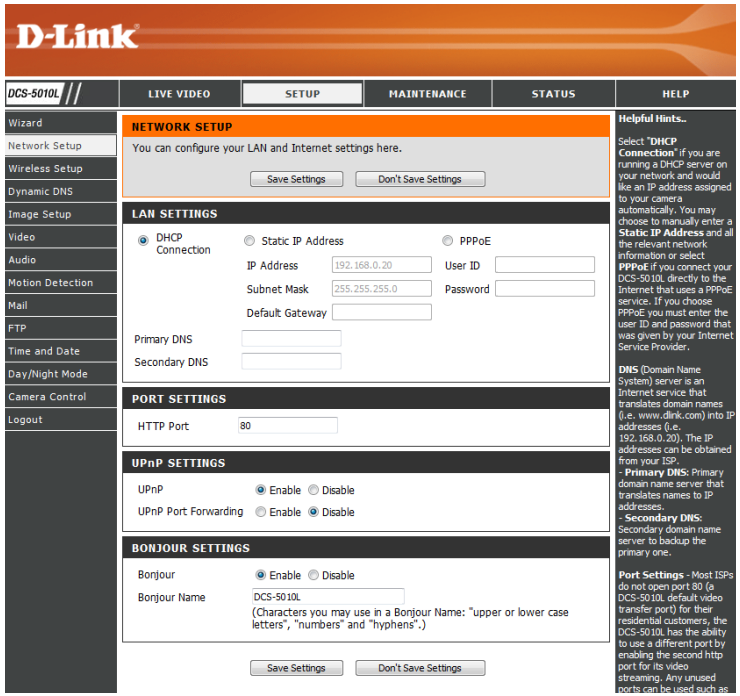
IP Address: The fixed IP address
Subnet Mask: The default value is "255.255.255.0." Used to determine if the destination is the same subnet.
Default Gateway: The gateway used to forward data to destinations in a different subnet. Invalid gateway settings may cause the failure of transmissions to a different subnet.
Primary DNS: Primary domain name server that translates names to IP addresses.
Secondary DNS: Secondary domain name server to backup the Primary DNS.

PPoE If you need to connect to the Internet using a PPoE connection, click on the **PPoE** radio button and enter the username and password provided to you by your Internet Service Provider or Network Administrator

Port Settings: You may configure a second HTTP port that will allow you to connect to the camera via a standard web browser. The port can be set to a number other than the default TCP port of 80. A corresponding port must be opened on the router. For example, if the port is changed to 1010, users must type **http://192.168.0.100:1010** instead of only "http://192.168.0.100".

UPnP Settings: Enable this setting to configure your camera as a UPnP device in the network. You can also enable UPnP port forwarding.

Bonjour Settings: Enable this setting to allow your camera to be discovered by the Bonjour service. You can also specify a Bonjour name for the device.


D-Link
DCS-5010L
LIVE VIDEO
SETUP
MAINTENANCE
STATUS
HELP
Wizard
Network Setup
Wireless Setup
Dynamic DNS
Image Setup
Video
Audio
Motion Detection
Mail
FTP
Time and Date
Day/Night Mode
Camera Control
Logout
NETWORK SETUP
You can configure your LAN and Internet settings here.
Save Settings
Don't Save Settings
LAN SETTINGS
DHCP Connection
Static IP Address
PPPoE
IP Address
192.168.0.20
Subnet Mask
255.255.255.0
Default Gateway
User ID
Password
Primary DNS
Secondary DNS
PORT SETTINGS
HTTP Port
80
UPnP SETTINGS
UPnP
Enable
Disable
UPnP Port Forwarding
BONJOUR SETTINGS
Bonjour
Bonjour Name
DCS-5010L
(Characters you may use in a Bonjour Name: "upper or lower case letters", "numbers" and "hyphens".)
Helpful Hints..
Select "DHCP Connection" if you are running a DHCP server on your network and would like an IP address assigned to your camera automatically. You may choose to manually enter a Static IP Address and all the relevant network information or select PPPoE if you connect your DCS-5010L directly to the Internet that uses a PPPoE service. If you choose PPPoE you must enter the user ID and password that was given by your Internet Service Provider.
DNS (Domain Name System) server is an Internet service that translates domain names (i.e. www.dlink.com) into IP addresses (i.e. 192.168.0.20). The IP addresses can be obtained from your ISP.
- Primary DNS: Primary domain name server that translates names to IP addresses.
- Secondary DNS: Secondary domain name server to backup the primary one.
Port Settings - Most ISPs do not open port 80 (a DCS-5010L default video transfer port) for their residential customers, the DCS-5010L has the ability to use a different port by enabling the second http port for its video streaming. Any unused ports can be used such as

Wireless Setup

This section allows you to set up and configure the wireless settings on your camera.

Enable Wireless: Check this box to allow your camera to connect to your network wirelessly.

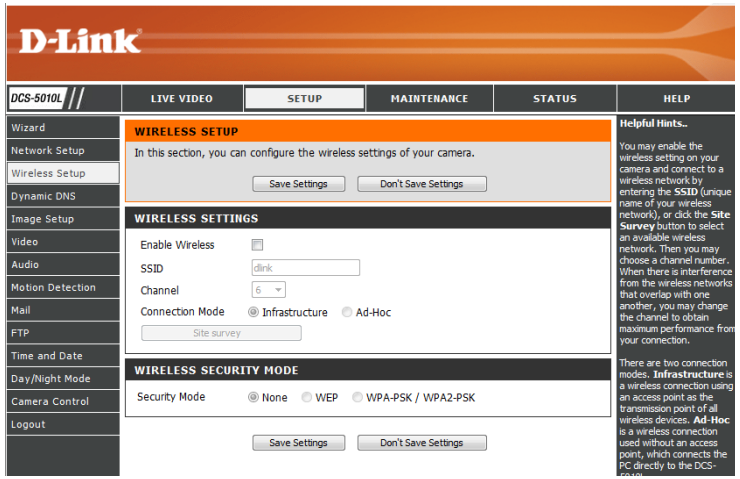
SSID: Enter the network name (SSID) of the wireless network you want to connect to. You can also click the **Site Survey** button below to choose an available network and fill in settings automatically.

Channel: If you are using **Ad-Hoc** as your connection mode, select the same channel that is being used by your wireless network.

Connection Mode: Select the connection mode used by your wireless network. In most cases, you should select **Infrastructure**. **Ad-Hoc** is only used if your camera is directly connecting to another PC or device without the use of a router or access point.

Site Survey: Clicking this button will allow you to select an available wireless network to connect to, and will fill in the necessary settings for you.

Wireless Security Mode: Select the wireless security mode used by your wireless network. If you select WEP or WPA-PSK/WPA2-PSK, enter the password for your wireless network in the text box that appears.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DCS-5010L
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Wizard
Network Setup
Wireless Setup
Dynamic DNS
Image Setup
Video
Audio
Motion Detection
Mail
FTP
Time and Date
Day/Night Mode
Camera Control
Logout
WIRELESS SETUP
In this section, you can configure the wireless settings of your camera.
Save Settings
Don't Save Settings
WIRELESS SETTINGS
Enable Wireless
SSID
dlink
Channel
6
Connection Mode
Infrastructure
Ad-Hoc
Site survey
WIRELESS SECURITY MODE
Security Mode
None
WEP
WPA-PSK / WPA2-PSK
Save Settings
Don't Save Settings
Helpful Hints..
You may enable the wireless setting on your camera and connect to a wireless network by entering the SSID (unique name of your wireless network), or click the Site Survey button to select an available wireless network. Then you may choose a channel number. When there is interference from the wireless networks that overlap with one another, you may change the channel to obtain maximum performance from your connection.
There are two connection modes. Infrastructure is a wireless connection using an access point as the transmission point of all wireless devices. Ad-Hoc is a wireless connection used without an access point, which connects the PC directly to the DCS-

Dynamic DNS (DDNS)

This section allows you to configure the DDNS setting for your camera. DDNS will allow all users to access your camera using a domain name instead of an IP address.

Enable: Click to enable the DDNS function.

Server Address: Select your Dynamic DNS Server from the pull-down menu.

Host Name: Enter the host name of the DDNS server.

User Name: Enter your username or e-mail used to connect to the DDNS.

Password: Enter your password used to connect to the DDNS server.

Timeout: This allows you to specify the periodic update time for the DDNS address.

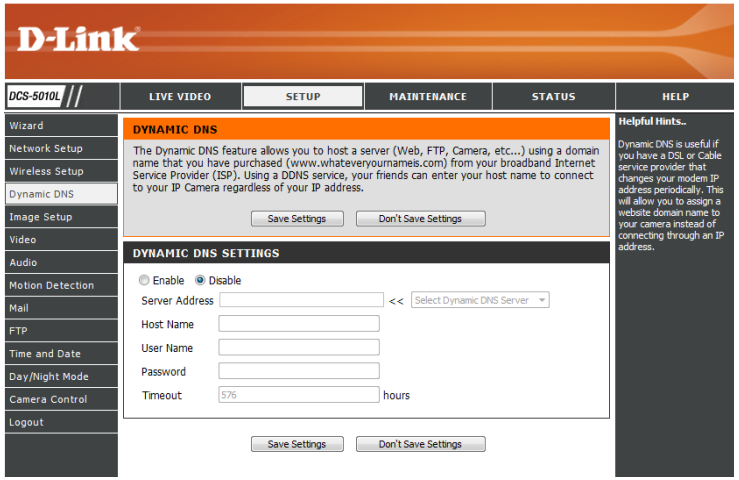


Image Setup

This section allows you to configure the image settings for your camera.

Enable Antiflicker: If you have lights flickering in your camera video, try enabling antiflicker. Otherwise, you should leave this disabled.

Flip Image: Select this box to vertically flip the video.

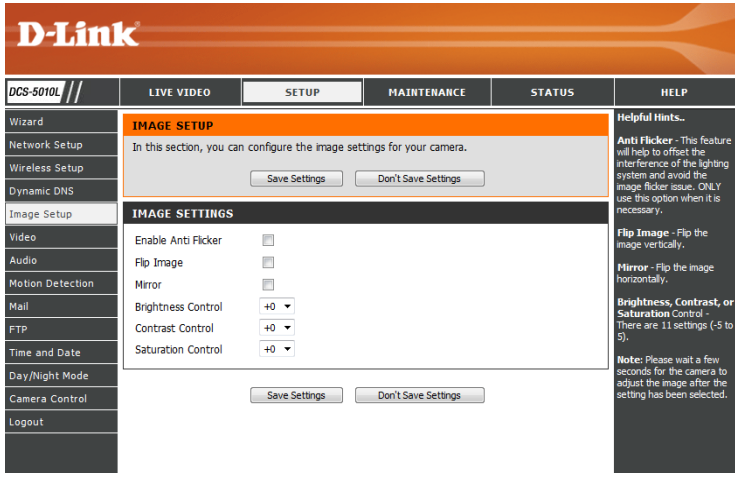
Mirror: Horizontally flip the video.

Note: If the camera is installed upside down, Flip Image and Mirror should both be checked

Brightness Control: Allows you to adjust the brightness level. Select a setting between -5 and +5.

Contrast Control: Allows you to adjust the contrast level. Select a setting between -5 and +5.

Saturation Control: Allows you to adjust the saturation level. Select a setting between -5 and +5.



Video

This section allows you to configure the video settings for your camera.

Video Profile: This section allows you to change the **Resolution**, **FPS**, and **Quality**.

Encode Type: Your camera has separate settings for the H.264 and MJPEG video streams.

Resolution: Select the desired video resolution from three formats: 640x480, 320x240, and 160x112. Higher settings offer better quality, but will require more bandwidth to stream.

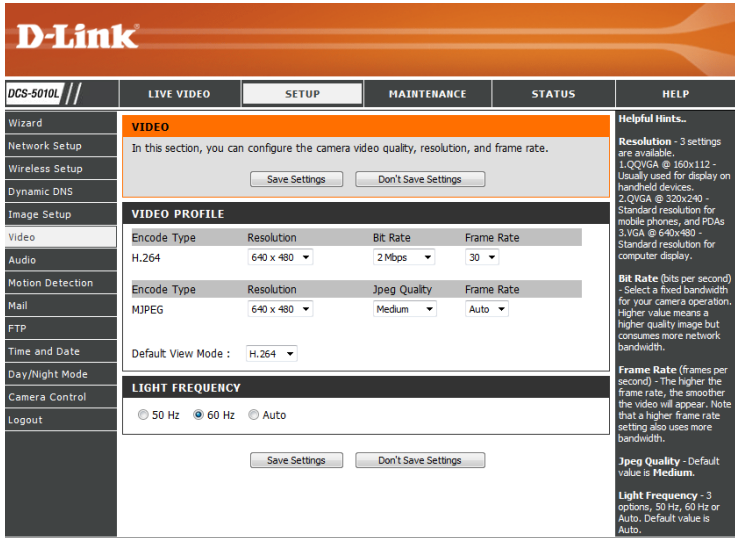
Bit Rate Select the desired bit rate for the video. A higher bit rate will increase image quality, but will require more bandwidth to stream.

FPS: Select the frame rate (FPS) to use for the video stream. Higher settings offer better quality, but will require more bandwidth to stream.

JPEG Quality: Select one of five levels of image quality: Highest, High, Medium, Low, and Lowest.

Default View Mode: Select the default encoding to use when viewing your video on the **Live Video** page.

Light Frequency: Select the frequency used by your lighting and power to help reduce image flicker.



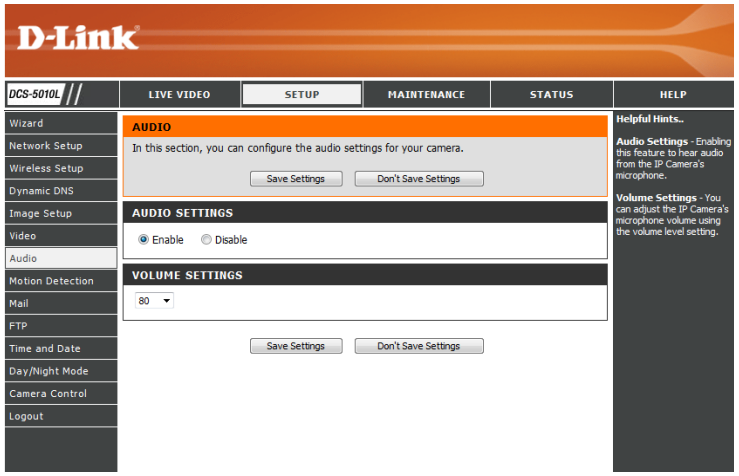
Audio

This section allows you to adjust the audio settings for your camera.

Note: Please wait a few seconds for the camera to adjust the audio after making changes.

Audio Settings: You may **Enable** or **Disable** the camera audio feed.

Volume Settings: Select the desired volume percentage level.



Motion Detection

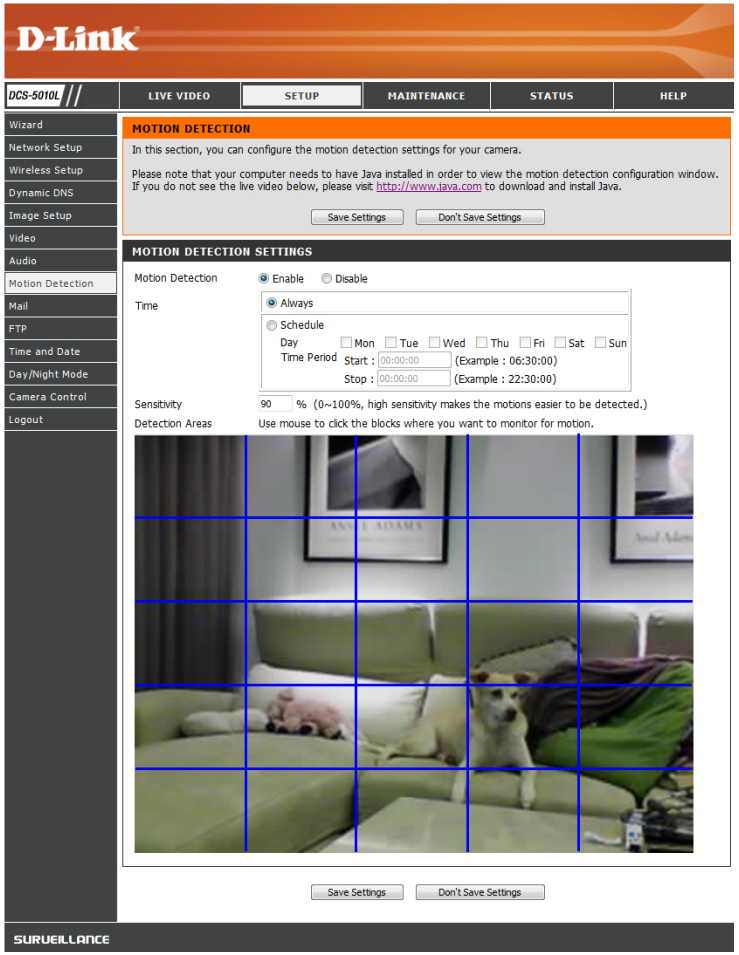
Motion detection allows you to mark areas of your camera's video to monitor for motion, which can be used to trigger snapshots or recordings. Refer to "Mail" on page 31 and "FTP" on page 33 for more details.

Motion Detection: Select whether you want to enable or disable the motion detection feature of your camera.

Time: Specify whether you want to **Always** have motion detection enabled, or according to a **Schedule** that you define.

Sensitivity: Specify the amount of difference required to determine whether there was motion.

Detection Areas: Use your mouse to click on the areas of the video that you would like to monitor for motion.



Mail

This section allows you to configure your camera to send snapshots and video clips to an e-mail address. If you are not sure what settings to use, check with your e-mail service provider.

SMTP Server Address: This is the domain name or IP address of your external e-mail server.

SMTP Server Port: This allows you to set the port for the SMTP Server. The default value is 25, and should only be changed if advised by your e-mail provider.

Sender e-mail Address: This is the e-mail address listed as the sender for your notification e-mails.

Receiver e-mail Address: This is the e-mail address that your notification e-mails will be sent to.

User Name: If the SMTP server uses authentication, enter your user name.

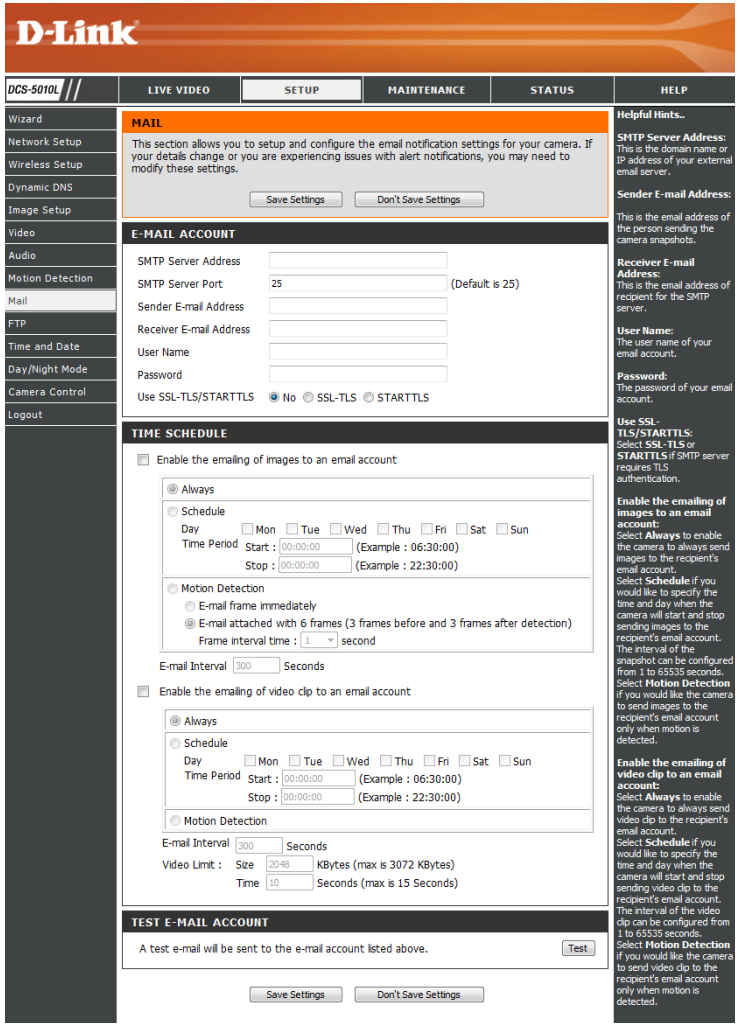
Password: If the SMTP server uses authentication, enter your password.

For example, if you want to use Gmail with SSL-TLS for e-mail notifications, you can follow the setup procedure as below:

Step 1 - Enter "smtp.gmail.com" in SMTP Server Address.
Step 2 - Change the SMTP server port number from 25 to **465**.
Step 3 - Enter your gmail e-mail address in Sender E-mail Address.
Step 4 - Enter the destination e-mail address in Receiver E-mail Address.
Step 5 - Enter the user name required to access the SMTP server.
Step 6 - Enter the password required to access the SMTP server.
Step 7 - Select **SSL-TLS** and then click **Save Settings**.
Step 8 - Click the **Test** button to send a test e-mail to the account listed above.

Note: You can also use **STARTTLS**, which will use SMTP server port number **587**.

Note: If you want to use a Yahoo SMTP server, the SMTP server address will be different between each registered region, and only SMTP port **465** is supported for **SSL-TLS**.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Dynamic DNS
Image Setup
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Motion Detection
Mail
FTP
Time and Date
Day/Night Mode
Camera Control
Logout
MAIL
This section allows you to setup and configure the email notification settings for your camera. If your details change or you are experiencing issues with alert notifications, you may need to modify these settings.
Save Settings
Don't Save Settings
E-MAIL ACCOUNT
SMTP Server Address
SMTP Server Port
25
(Default is 25)
Sender E-mail Address
Receiver E-mail Address
User Name
Password
Use SSL-TLS/STARTTLS
No
SSL-TLS
STARTTLS
TIME SCHEDULE
Enable the emailing of images to an email account
Always
Schedule
Day
Mon
Tue
Wed
Thu
Fri
Sat
Sun
Time Period
Start :
(Example : 06:30:00)
Stop :
(Example : 22:30:00)
Motion Detection
E-mail frame immediately
E-mail attached with 6 frames (3 frames before and 3 frames after detection)
Frame interval time :
second
E-mail Interval
Seconds
Enable the emailing of video clip to an email account
Always
Schedule
Day
Mon
Tue
Wed
Thu
Fri
Sat
Sun
Time Period
Start :
(Example : 06:30:00)
Stop :
(Example : 22:30:00)
Motion Detection
E-mail Interval
Seconds
Video Limit :
Size
KBytes (max is 3072 KBytes)
Time
Seconds (max is 15 Seconds)
TEST E-MAIL ACCOUNT
A test e-mail will be sent to the e-mail account listed above.
Test
Save Settings
Don't Save Settings
Helpful Hints..
SMTP Server Address:
This is the domain name or IP address of your external email server.
Sender E-mail Address:
This is the email address of the person sending the camera snapshots.
Receiver E-mail Address:
This is the email address of recipient for the SMTP server.
User Name:
The user name of your email account.
Password:
The password of your email account.
Use SSL-TLS/STARTTLS:
Select SSL-TLS or STARTTLS if SMTP server requires TLS authentication.
Enable the emailing of images to an email account:
Select Always to enable the camera to always send images to the recipient's email account.
Select Schedule if you would like to specify the time and day when the camera will start and stop sending images to the recipient's email account.
The interval of the snapshot can be configured from 1 to 65535 seconds.
Select Motion Detection if you would like the camera to send images to the recipient's email account only when motion is detected.
Enable the emailing of video clip to an email account:
Select Always to enable the camera to always send video clip to the recipient's email account.
Select Schedule if you would like to specify the time and day when the camera will start and stop sending video clip to the recipient's email account.
The interval of the video clip can be configured from 1 to 65535 seconds.
Select Motion Detection if you would like the camera to send video clip to the recipient's email account only when motion is detected.

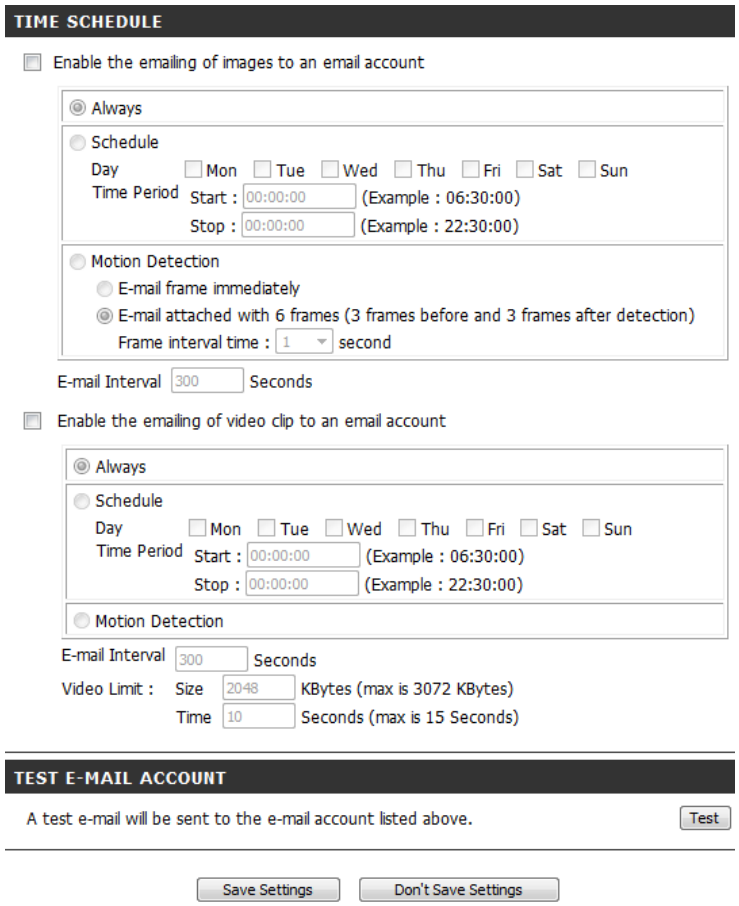
Enable the emailing of images to an email account: Enabling this will allow snapshots to be e-mailed to you in different ways:

- Choosing **Always** will email snapshots continuously based on the **Email Interval** specified.
- Choosing **Schedule** will allow you to schedule when to start and stop the emailing of snapshots.
- Select **Motion Detection** if you would like the camera to email images only when motion is detected. You can choose whether to email a snapshot immediately, or email 6 snapshots together, with 3 frames before and after motion was detected. You can also set the **Frame interval time** to specify how far apart the snapshots should be.

Email Interval: This sets the limit for how frequently email notifications will be sent. This can be set from 1 to 65535 seconds.

Enable the emailing of video clips to an email account: Enabling this will allow video clips to be emailed to you in different ways. This is the same as emailing images, as specified above, but will take video clips according to the **Video Limit** settings you specify.

Test Email Account: This will send a test email according to the email settings you have specified above.



FTP

This section allows you to configure your camera to send snapshots and video clips to an FTP server.

Host Name: Enter the IP address of the FTP server that you will be connecting to.

Port: Enter the port of the FTP server that you will be connecting to.

User Name: Enter the user name of your FTP server account.

Password: Enter the password of your FTP server account.

Path: Enter the destination path/folder to save files to on the FTP server.

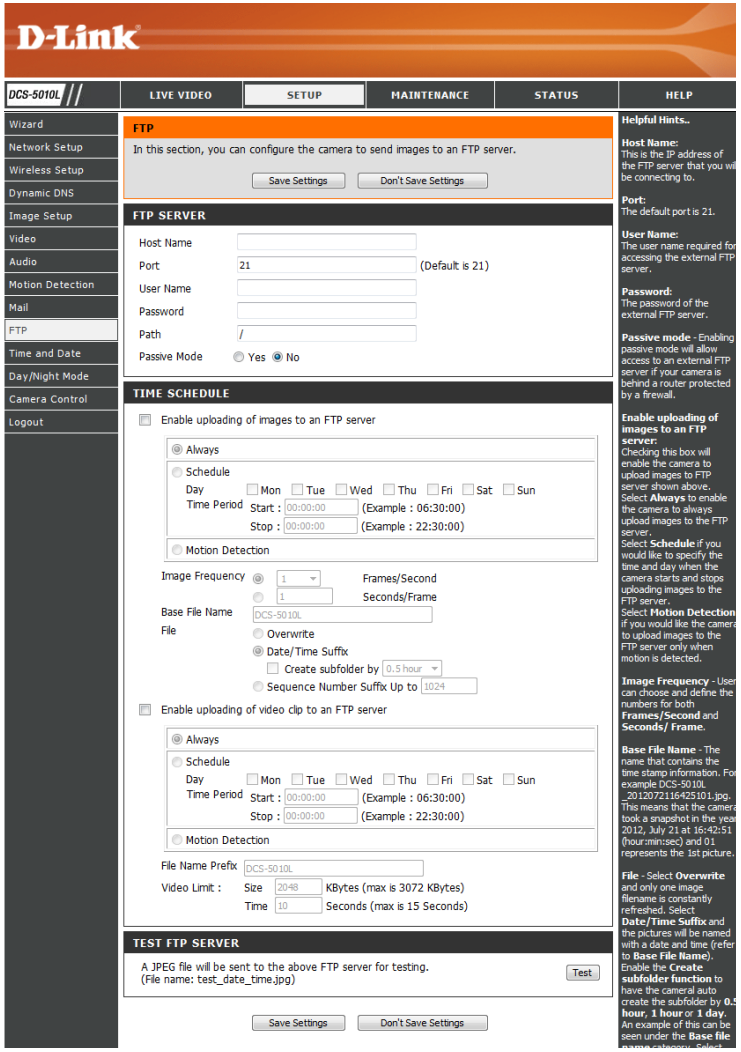
Passive Mode: Enabling passive mode may help you reach your FTP server if your camera is behind a router protected by a firewall.

Enable the uploading of images to an FTP server: Enabling this will allow snapshots to be uploaded in different ways:

- Choosing **Always** will upload snapshots continuously based on the **Image Frequency** specified.
- Choosing **Schedule** will allow you to schedule when to start and stop the uploading of snapshots.
- Select **Motion Detection** if you would like the camera to upload images only when motion is detected.

Image Frequency: Set how frequently you want images to be taken and uploaded. You can choose to upload by frames per second, or by seconds per frame.

Base File Name: Set the desired base file name for your snapshots.



File: Select how you want uploading of snapshots to be handled:

- **Overwrite** will replace the old snapshot with the new one. This means you will only have one snapshot that is updated every time a new one is taken.
- **Date/Time Suffix** will add the date and time to the end of the snapshot file name. You can also choose to make subfolders based on a period of time you specify to help you organize your snapshots.
- **Sequence Number Suffix** will add a number to the end of the snapshot file name up to the number you specify, after which the oldest files will be overwritten.

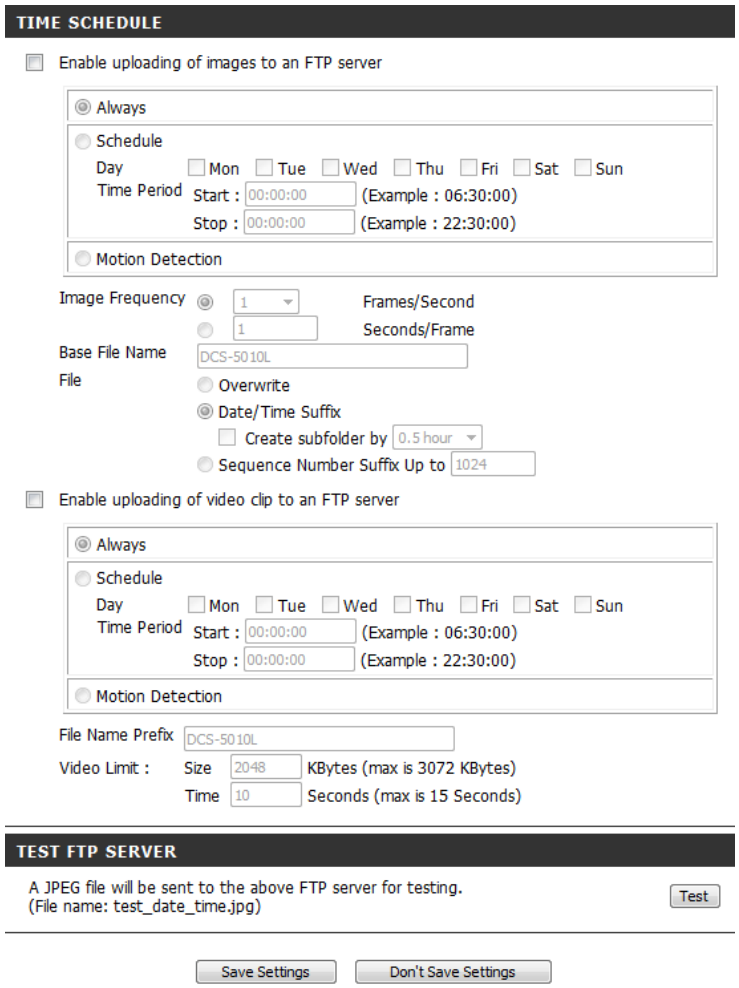
Enable the uploading of video clip to an FTP server: Enabling this will allow video clips to be uploaded to your FTP server in various ways.

- Choosing **Always** will upload video continuously, based on the Video Limit specified below.
- Choosing **Schedule** will allow you to schedule when to start and stop the uploading of video.
- Select **Motion/Sound Detection** if you would like the camera to upload video only when motion or sound is detected.

File Name Prefix: Set the desired base file name for your videos.

Video Limit: Specify the maximum file size and duration of the videos to be uploaded.

Test FTP Server: Clicking on the **Test** button will send a test JPEG snapshot to the FTP server specified above to make sure that your settings are correct.



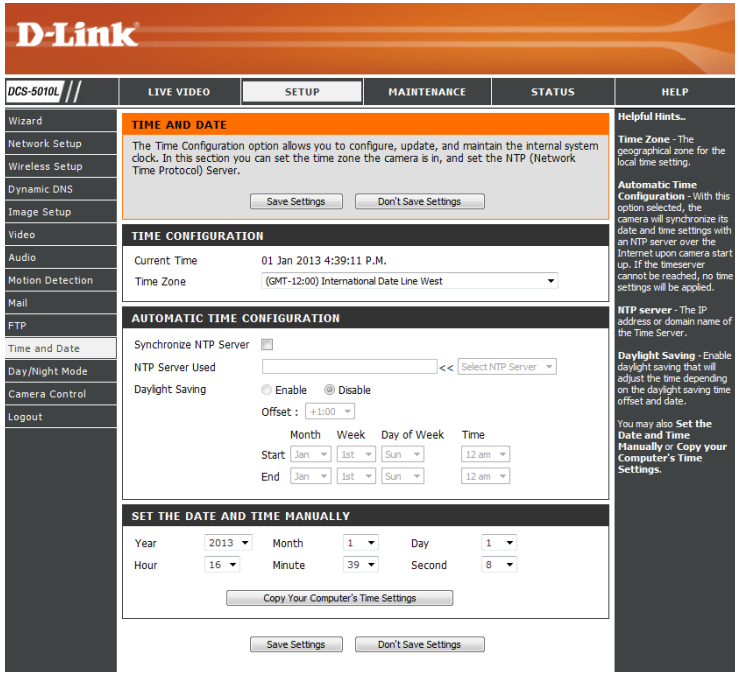
Time and Date

This section allows you to configure the settings of the internal system clocks for your camera.

Time Zone: Select the time zone for your region from the drop down menu.

Synchronize NTP Server: Enabling this will allow the camera to update its clock automatically from an NTP server. Select the NTP server closest to you, and select whether you want to apply daylight saving corrections.

Set the Date and Time Manually: If Synchronize NTP Server is disabled, you can set the date and time manually. You can also click on **Copy Your Computer's Time Settings** to automatically set the date and time based on your computer's settings.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Time and Date
Day/Night Mode
Camera Control
Logout
TIME AND DATE
The Time Configuration option allows you to configure, update, and maintain the internal system clock. In this section you can set the time zone the camera is in, and set the NTP (Network Time Protocol) Server.
Save Settings
Don't Save Settings
TIME CONFIGURATION
Current Time
01 Jan 2013 4:39:11 P.M.
Time Zone
(GMT-12:00) International Date Line West
AUTOMATIC TIME CONFIGURATION
Synchronize NTP Server
NTP Server Used
Select NTP Server
Daylight Saving
Enable
Disable
Offset :
Month
Week
Day of Week
Time
Start
End
SET THE DATE AND TIME MANUALLY
Year
Month
Day
Hour
Minute
Second
Copy Your Computer's Time Settings
Save Settings
Don't Save Settings
Helpful Hints..
Time Zone - The geographical zone for the local time setting.
Automatic Time Configuration - With this option selected, the camera will synchronize its date and time settings with an NTP server over the Internet upon camera start up. If the timeserver cannot be reached, no time settings will be applied.
NTP server - The IP address or domain name of the Time Server.
Daylight Saving - Enable daylight saving that will adjust the time depending on the daylight saving time offset and date.
You may also Set the Date and Time Manually or Copy your Computer's Time Settings.

Day/Night Mode

This section allows you to configure when Day and Night modes are used. Day mode uses the infrared cut filter to provide a corrected color image for times where there is available lighting. Night mode moves the filter out of the way to use all available light, and turns on the IR LED illuminators to allow for clear black and white video in dark areas with little or no light.

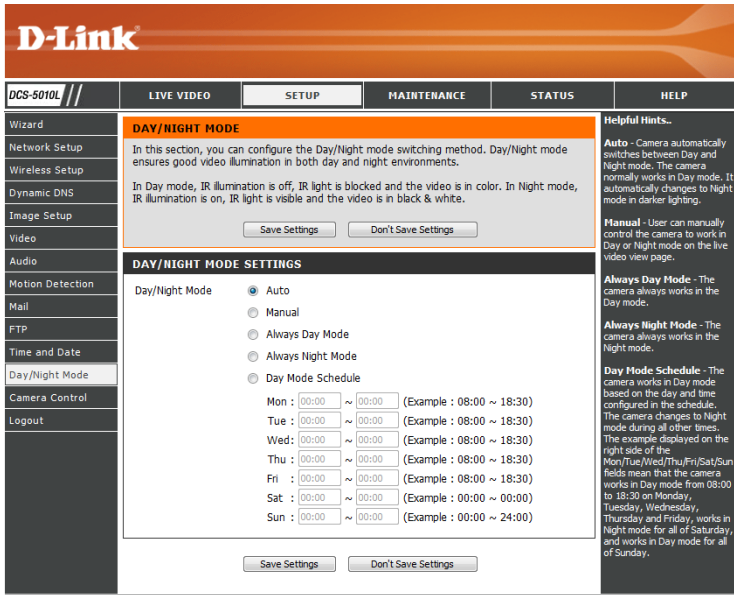
Auto: This mode will automatically switch between Day and Night mode based on the amount of available lighting.

Manual: This mode allows you to manually switch between modes through the **Live Video** page.

Always Day Mode: This sets the camera to always use Day mode.

Always Night Mode: This sets the camera to always use Night mode.

Day Mode Schedule: This sets the camera to use Day mode during the times you specify, and will switch to Night mode outside the times you specify.


D-Link
DCS-5010L
LIVE VIDEO
SETUP
MAINTENANCE
STATUS
HELP
Wizard
Network Setup
Wireless Setup
Dynamic DNS
Image Setup
Video
Audio
Motion Detection
Mail
FTP
Time and Date
Day/Night Mode
Camera Control
Logout
DAY/NIGHT MODE
In this section, you can configure the Day/Night mode switching method. Day/Night mode ensures good video illumination in both day and night environments.
In Day mode, IR illumination is off, IR light is blocked and the video is in color. In Night mode, IR illumination is on, IR light is visible and the video is in black & white.
Save Settings
Don't Save Settings
DAY/NIGHT MODE SETTINGS
Day/Night Mode
Auto
Manual
Always Day Mode
Always Night Mode
Day Mode Schedule
Mon : 00:00 ~ 00:00 (Example : 08:00 ~ 18:30)
Tue : 00:00 ~ 00:00 (Example : 08:00 ~ 18:30)
Wed: 00:00 ~ 00:00 (Example : 08:00 ~ 18:30)
Thu : 00:00 ~ 00:00 (Example : 08:00 ~ 18:30)
Fri : 00:00 ~ 00:00 (Example : 08:00 ~ 18:30)
Sat : 00:00 ~ 00:00 (Example : 00:00 ~ 00:00)
Sun : 00:00 ~ 00:00 (Example : 00:00 ~ 24:00)
Save Settings
Don't Save Settings
Helpful Hints..
Auto - Camera automatically switches between Day and Night mode. The camera normally works in Day mode. It automatically changes to Night mode in darker lighting.
Manual - User can manually control the camera to work in Day or Night mode on the live video view page.
Always Day Mode - The camera always works in the Day mode.
Always Night Mode - The camera always works in the Night mode.
Day Mode Schedule - The camera works in Day mode based on the day and time configured in the schedule. The camera changes to Night mode during all other times. The example displayed on the right side of the Mon/Tue/Wed/Thu/Fri/Sat/Sun fields mean that the camera works in Day mode from 08:00 to 18:30 on Monday, Tuesday, Wednesday, Thursday and Friday, works in Night mode for all of Saturday, and works in Day mode for all of Sunday.

Camera Control

This section allows you to configure the pan and tilt operations of your camera. You can specify the lens location for the **Home** button, and specify up to 24 pre-set lens locations, allowing you to quickly view these pre-determined areas of the camera's range from the **Live Video** screen.

Pan/Tilt Wheel: Use the directional arrows on the wheel to move the camera lens through its pan and tilt ranges.

Set as Home: Click this button to set the current lens location as the **Home** location. Once set, the camera will return to this location whenever the Home button in the center of the pan/tilt wheel is clicked.

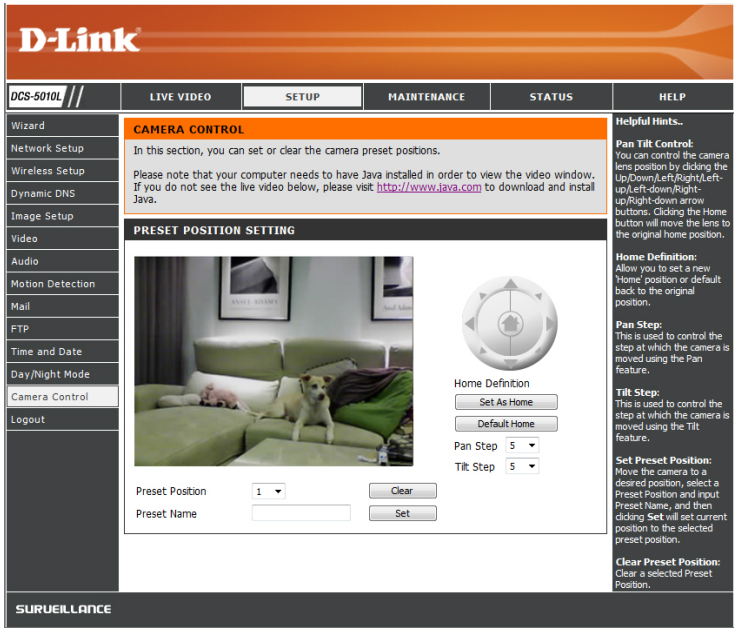
Default Home: Clicking on this button returns the **Home** location to the factory default setting.

Pan Step: Select the increment of movement for each press of a pan (up/down) arrow on the pan/tilt wheel.

Tilt Step: Select the increment of movement for each press of a tilt (left/right) arrow on the pan/tilt wheel.

Preset Position: The camera allows you to specify up to 24 pre-determined lens positions, which can be used to quickly move the camera's view to areas of interest.

- Select the number of the position that you would like to specify.
- Use the pan/tilt wheel to move the camera's lens to the desired preset position.
- Enter a name to help you easily identify the preset.
- Click on the Set button to save the preset.
- Any pre-saved positions can be cleared by selecting the desired preset and clicking on the Clear button.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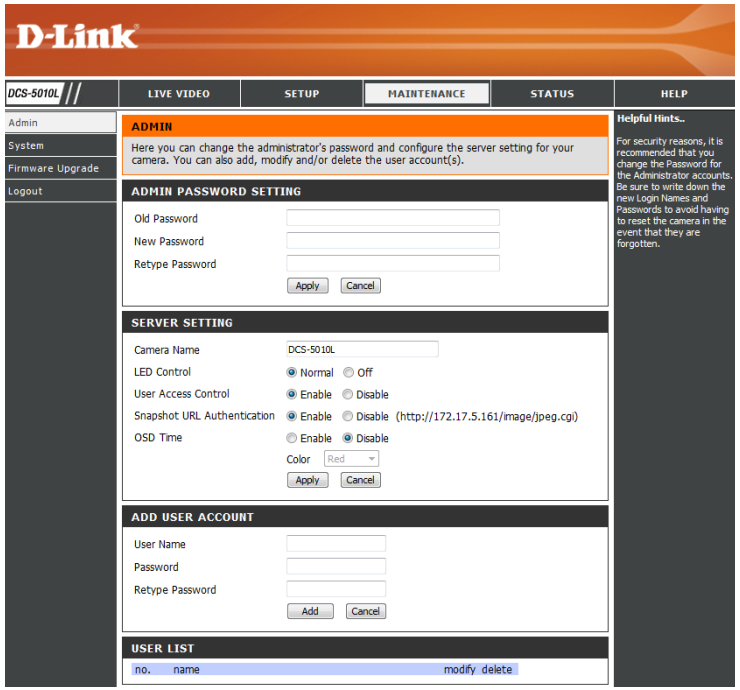
CAMERA CONTROL
In this section, you can set or clear the camera preset positions.
Please note that your computer needs to have Java installed in order to view the video window. If you do not see the live video below, please visit http://www.java.com to download and install Java.
PRESET POSITION SETTING
Home Definition
Set As Home
Default Home
Pan Step 5
Tilt Step 5
Preset Position 1
Clear
Preset Name
Set
Helpful Hints..
Pan Tilt Control:
You can control the camera lens position by clicking the Up/Down/Left/Right/Left-up/Left-down/Right-up/Right-down arrow buttons. Clicking the Home button will move the lens to the original home position.
Home Definition:
Allow you to set a new 'Home' position or default back to the original position.
Pan Step:
This is used to control the step at which the camera is moved using the Pan feature.
Tilt Step:
This is used to control the step at which the camera is moved using the Tilt feature.
Set Preset Position:
Move the camera to a desired position, select a Preset Position and input Preset Name, and then clicking Set will set current position to the selected preset position.
Clear Preset Position:
Clear a selected Preset Position.
SURVEILLANCE

Maintenance

Admin

This section allows you to change the administrator's password and configure the server settings for your camera. You can also manage the user account(s) that are allowed to access to your camera.



Admin Password: To change the admin password used to log into the web interface, enter the old password, then enter the new password and retype it in the next text box, then click **Apply**.

Camera Name: Specify a name for your camera

LED Control: Select **Normal** to enable the LEDs on the front of the device, or select **Off** to disable the LED. Disabling the LED function may be useful if you want to make the camera less obvious.

User Access Control: Select **Enable** to enable user access control or **Disable** to allow only the administrator account to access the camera.

Snapshot URL Authentication: Select **Enable** to allow access to the current camera snapshot via the web address indicated.

OSD Time: Select **Enable** to allow the current time to be added to the camera video, and select a color to use for the text.

Add User Account: You can create new users to provide viewing access for your camera's video. User accounts will only be able to access the **Live Video** section of the web configuration interface, but cannot access any other parts or change any settings.

To create a new user, enter a user name, password, and retype the password, then click **Add**. A maximum of 8 user accounts can be created.

User List: Displays the account names of authorized users. You can modify or delete an account by clicking on its modify or delete icon.

System

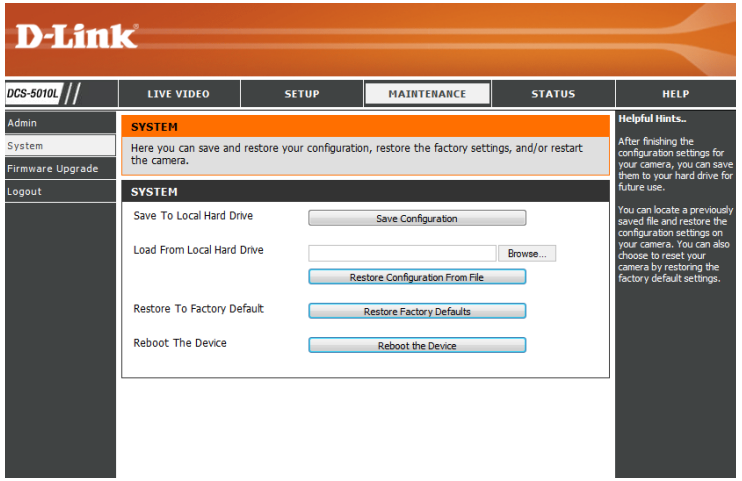
This section allows you to save and restore your configuration, restore the factory settings, and/or restart the camera.

Save To Local Hard Drive: Click the **Save Configuration** button to save the current camera configuration to your local PC.

Load From Local Hard Drive: To load a previously saved configuration, click the **Browse...** button, select your saved configuration file, then click the **Restore Configuration From File** button.

Restore To Factory Default: Click the **Restore Factory Defaults** button to reset all settings back to the factory defaults. Please note that this will erase any changes you have made to the settings of the camera.

Reboot The Device: Click the **Reboot the Device** button to reboot the camera.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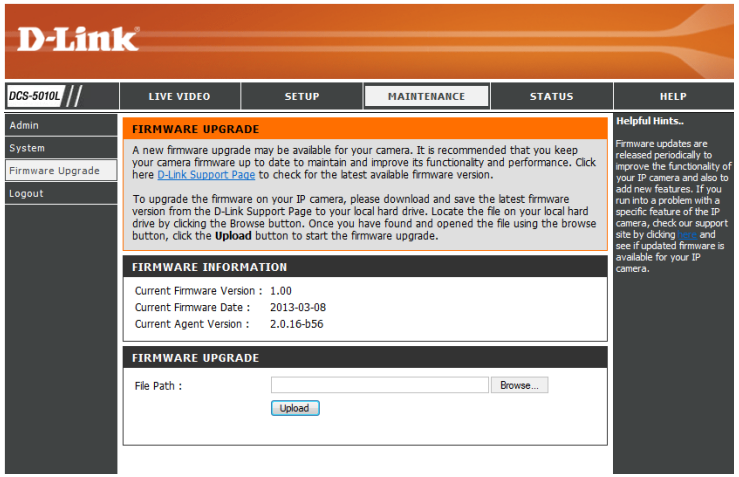
Logout
SYSTEM
Here you can save and restore your configuration, restore the factory settings, and/or restart the camera.
SYSTEM
Save To Local Hard Drive
Save Configuration
Load From Local Hard Drive
Browse...
Restore Configuration From File
Restore To Factory Default
Restore Factory Defaults
Reboot The Device
Reboot the Device
Helpful Hints..
After finishing the configuration settings for your camera, you can save them to your hard drive for future use.
You can locate a previously saved file and restore the configuration settings on your camera. You can also choose to reset your camera by restoring the factory default settings.

Firmware Upgrade

Your current firmware version and date will be displayed on your screen. You may go to the D-Link Support Page to check for the latest firmware versions available.

To upgrade the firmware on your DCS-5010L, download the latest firmware from the D-Link Support Page to your local hard drive. Click the **Browse...** button and select the firmware file, then click the **Upload** button to start the firmware upgrade.

Warning: The firmware upgrade process must not be interrupted or the camera may be damaged. When upgrading firmware, do not unplug the camera or your PC, or close your web browser until the process is complete. It is also highly recommended that you use a wired connection for your camera and PC when upgrading firmware.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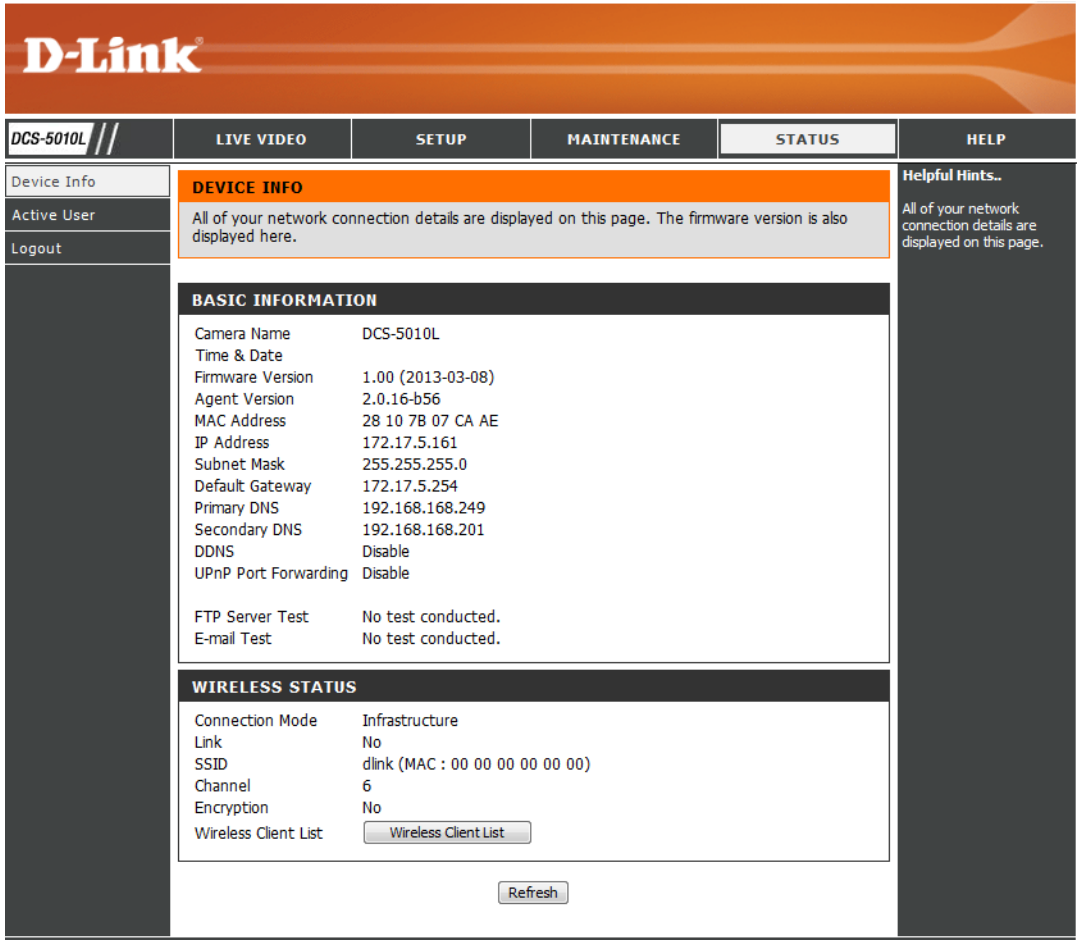
FIRMWARE UPGRADE
A new firmware upgrade may be available for your camera. It is recommended that you keep your camera firmware up to date to maintain and improve its functionality and performance. Click here D-Link Support Page to check for the latest available firmware version.
To upgrade the firmware on your IP camera, please download and save the latest firmware version from the D-Link Support Page to your local hard drive. Locate the file on your local hard drive by clicking the Browse button. Once you have found and opened the file using the browse button, click the Upload button to start the firmware upgrade.
FIRMWARE INFORMATION
Current Firmware Version : 1.00
Current Firmware Date : 2013-03-08
Current Agent Version : 2.0.16-b56
FIRMWARE UPGRADE
File Path :
Browse...
Upload
Helpful Hints..
Firmware updates are released periodically to improve the functionality of your IP camera and also to add new features. If you run into a problem with a specific feature of the IP camera, check our support site by clicking here and see if updated firmware is available for your IP camera.

Status

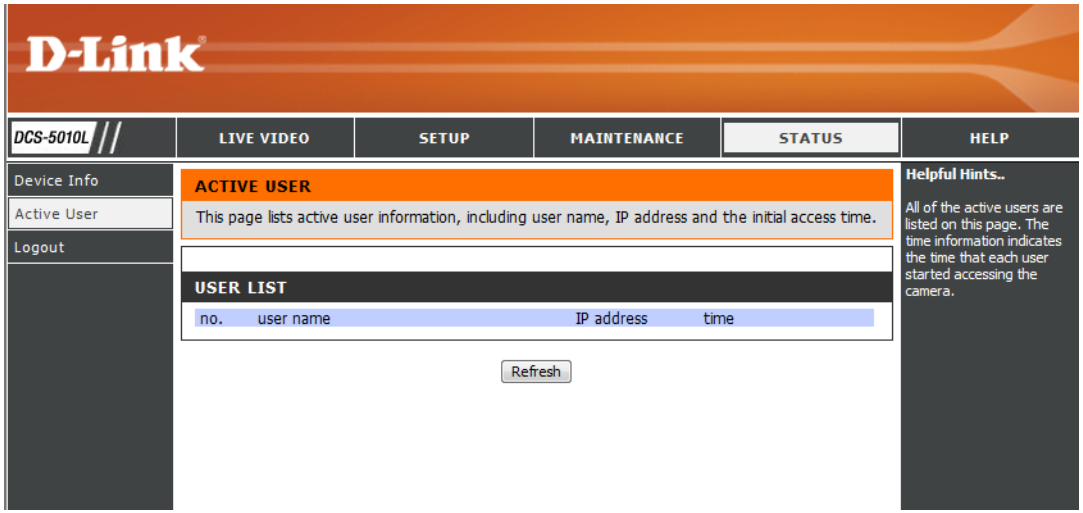
Device Info

This section displays all the detailed information about your device and network settings.



Active User

This page lists all the active users' information including the User Name, IP address, and the time that camera access began.



Troubleshooting

1. What is Remote Access? How do I enable it?

Remote Access allows you to access your camera from any PC connected to the Internet through a web browser. This lets you view your camera feed and manage your camera's settings when you're away from home.

To enable Remote Access, simply go through the Camera Installation Wizard included on the Installation CD that came in your package. You can also download the wizard from: **http://www.mydlink.com/support**

After going through the wizard, you should see "Remote Status: Enabled" on the summary page.

If you see Remote Status: Disabled, make sure that:

the front LED on your camera is lit solid green

your Internet connection is working

your router's LAN & WAN connections are working properly

your router has UPnP enabled (if your router does not support UPnP, please refer to Appendix A)

your router can get a public IP address

your router's firmware has been upgraded to the latest version

you have tried rebooting your router by unplugging it, then plugging it back in

After checking the above items, you can click the Retry button to refresh the summary screen to see if Remote Access has been enabled.

2. What can I do if I forget the password for my camera's web configuration interface?

If you forget your password, you will need to perform a factory reset of your camera. This process will change all your settings back to the factory defaults. It is therefore recommended that you make a record of the password for future reference.

To reset your camera, please use an unfolded paperclip to press and hold the RESET button for at least 10 seconds while your camera is plugged in.

3. The image on the live view is blurry or out of focus, what can I do?

You can manually adjust the focus of the lens by rotating the bezel on the front of the camera (surrounding the lens). While watching the live view, rotate the bezel until the desired level of focus is achieved.

4. Why don't the LEDs light up?

The power supply might be faulty. Confirm that you are using the provided DC 12V power supply for this network camera. Verify that the power supply is correctly connected. The WPS LED will only turn on if there is a WPS connection present, the camera may still be functioning correctly even if this LED is not lit. If the camera is functioning normally, the LEDs may have been disabled. See "Admin" on page 38 for information about how to enable the LEDs.

5. Why is the camera's network connection unreliable?

There might be a problem with the network cable. To confirm that the cables are working, PING the address of a known device on the network. If the cabling is OK and your network is reachable, you should receive a reply similar to the following (…bytes = 32 time = 2 ms).

Another possible problem may be that the network device such as a hub or switch utilized by the Network Camera is not functioning properly. Please confirm the power for the devices are well connected and functioning properly.

If you are using a wireless connection to connect the camera, be aware of the range limitations of the wireless N standard. Most wireless N devices have a maximum indoor range of around 70 metres (230 feet). Also be aware that obstacles such as walls, floors, doors and other solid objects can have an adverse effect on signal range.

6. Why does a series of broad vertical white lines appear throughout the image?

It could be that the image sensor has become overloaded when it has been exposed to bright light such as direct exposure to sunlight or halogen lights. Reposition the camera into a more shaded area immediately, as prolonged exposure to bright lights will damage the sensor.

7. The camera is producing noisy images. How can I solve the problem?

The video images might be noisy if the camera is used in a very low light environment. Try switching to night mode if you are consistently monitoring a low light area.

8. The images are poor quality, how can I improve the image quality?

Make sure that your computer's display properties are set to at least 6-bit color. Using 16 or 256 colors on your computer will produce dithering artifacts in the image, making the image look as if it is of poor quality.

You may also need to check your image settings to make sure the brightness, contrast, and other settings are set properly. For more, refer to "Image Setup" on page 27.

9. Why are no images available through the Web browser?

ActiveX might be disabled. If you are viewing the images from Internet Explorer make sure ActiveX has been enabled in the Internet Options menu. You may also need to change the security settings on your browser to allow the ActiveX plug-in to be installed. Also, check that you have the latest version of Java installed. Java can be downloaded from **http://www.java.com**

If you are using Internet Explorer with a version number 6 or lower, then you will need to upgrade your Web browser software in order to view the streaming video transmitted by the Network Camera.

Technical Specifications

SYSTEM REQUIREMENTS

- Microsoft Windows® 8/7/Vista/XP, or Mac with OS X 10.6 or higher
- PC with 1.3 GHz or above and at least 128 MB RAM
- Internet Explorer 7, Firefox 12, Safari 4, or Chrome 20 or higher version with Java installed and enabled

NETWORKING PROTOCOL

- IPV4, ARP, TCP, UDP, ICMP
- DHCP Client
- NTP Client (D-Link)
- DNS Client
- DDNS Client (Dyndns and D-Link)
- SMTP Client
- FTP Client
- HTTP Server
- PPPoE
- UPnP Port Forwarding
- LLTD

BUILT-IN PROTOCOL

- 10/100 BASE-TX Fast Ethernet
- 802.11b/g/n WLAN

WIRELESS CONNECTIVITY

- 802.11b/g/n Wireless with WEP/WPA/WPA2 security
- WPS

WIRELESS TRANSMIT OUTPUT POWER (TYPICAL)

- 11b - 16 dbm
- 11g/11n - 12 dbm

SDRAM

- 64 MB

FLASH MEMORY

- 8 MB

RESET BUTTON

- Reset to factory default

VIDEO CODECS

- H.264
- MJPEG
- JPEG for still images

VIDEO FEATURES

- Adjustable image size and quality
- Time stamp and text overlay
- Flip and Mirror

RESOLUTION

- 640 x 480 at up to 30 fps
- 320 x 240 at up to 30 fps
- 160 x 112 at up to 30 fps

LENS
- Focal length: 2.2 mm, F2.0

SENSOR
- VGA 1/5 inch CMOS sensor

IR LED
- 8 meter illumination distance with 10 LEDs and light sensor

MINIMUM ILLUMINATION
- Color: 1 lux @ F2.0 (Day)
- B/W: 0 lux @ F2.0 (Night)

VIEWING ANGLE
- Horizontal: 66.2°
- Vertical: 49.08°
- Diagonal: 77.04°

PAN/TILT RANGE
- Pan Range: +170° ~ -170° (Total 340°)
- Tilt Range: +95° ~ -25° (Total 120°)

DIGITAL ZOOM
- Up to 4x

3A CONTROL
- AGC (Auto Gain Control)
- AWB (Auto White Balance)
- AES (Auto Electronic Shutter)

POWER
- Input: 100-240 V AC, 50/60 Hz
- Output: 12 V DC, 1 A

DIMENSIONS (W X D X H)
- Camera Only - 102.35 x 101.27 x 133.6 mm (4.03 x 3.99 x 5.26 inches)
- Camera Including Mounting Bracket - 102.35 x 101.27 x 230.0 mm (4.03 x 3.99 x 9.06 inches)

WEIGHT
- Device: 292.4 grams (0.64 lbs)
- Mounting Bracket: 60.8 grams (0.13 lbs)

MAX POWER CONSUMPTION
- 8.64 W

OPERATION TEMPERATURE
- 0 ˚C to 40 ˚C (32 ˚F to 104 ˚F)

STORAGE TEMPERATURE
- -20 ˚C to 70 ˚C (-4 ˚F to 158 ˚F)

HUMIDITY
- 20-80% RH non-condensing

EMISSION (EMI), SAFETY & OTHER CERTIFICATIONS
- FCC Class B
- IC
- C-Tick
- CE

Contacting Technical Support

U.S. and Canadian customers can contact D-Link technical support through our web site or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g., DCS-5010L)
- Hardware Revision (located on the label on the bottom of the Network Camera (e.g., rev A1))
- Serial Number (s/n number located on the label on the bottom of the Network Camera).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support:
(877) 453-5465

Internet Support:
http://support.dlink.com

For customers within Canada:

Phone Support:
(800) 361-5265

Internet Support:
http://support.dlink.ca

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below (“Hardware”) will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below (“Warranty Period”), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Software Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim (USA):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow DLink to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.

- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-354-6555, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.com/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. DLink will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

Submitting A Claim (Canada):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- Customers need to provide their receipt (proof of purchase) even if the product is registered. Without a receipt, no warranty service will be done. The registration is not considered a proof of purchase.

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.

- The customer must obtain a Case ID Number from D-Link Technical Support at 1-800-361-5265, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.ca/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will be rejected by D-Link. Products shall be fully insured by the customer and shipped to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

- RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM – 9:00PM EST

What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link's judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties:

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability:

TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law:

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

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CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTICE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

Industry Canada Statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:
Radiation Exposure Statement:
This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This device has been designed to operate with an antenna having a maximum gain of 2 dB. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

Registration

Register your product online at registration.dlink.com

Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

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